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Appl. No. 10/036,992
Response Dated September 30, 2003
Reply to Office Action dated July 1, 2003

Amendments to the Claims

The following listing of claims replaces all prior versions and listings of claims in the application.

Listing of Claims

Claims 1-123 (Canceled)

Claim 124 (Withdrawn)^{2, 3}: A trawl net used for fishing, said net being capable of being drawn through the water so that a water velocity vector is created relative to the trawl net, the trawl net comprising a plurality of interconnected mesh cells, each of said mesh cells including at least two cell bars that are constructed and arranged so that said at least two cell bars intersect

² The "Office Action Summary," page 1 of the July 1, 2003, Office Action, does not list any claims as having been withdrawn from consideration. However, approximately eleven (11) months earlier page 2 of the Office Action dated July 31, 2002, acknowledged that Applicants' response to an Election/Restriction Requirement filed with the United States Patent and Trademark Office ("USPTO") on June 17, 2002, Paper No. 6, withdrew this claim from consideration.

³ The Office Action dated July 31, 2002, objected to the numbering of claims used in a Preliminary Amendment included in the application when filed on December 29, 2001, because the claim numbering appearing there violated 37 C.F.R. § 1.126. The July 31, 2002, Office Action thereupon states that claims 144-158 of the Preliminary Amendment had been renumbered 122-138. Claim numbering in this response conforms to that stated in the July 31, 2002, Office Action.

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25 said velocity vector at an acute angle, portions of at least one of
said at least two cell bars being formed with a plurality of
cambered sections that are oriented and configured so that movement
of cell bars through the water environment relative to said vector
creates a pressure differential across the cambered sections,
30 thereby establishing a lift vector on the cell bar in a predeter-
mined direction.

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Cont
Claim 125 (Withdrawn)^{2, 3}: The trawl net of Claim 144
wherein cambered sections include a strap.

Claim 126 (Withdrawn)^{2, 3}: The trawl net of Claim 144
wherein cambered sections include at least two product strands.

Claim 127 (Withdrawn)^{2, 3}: The trawl net of Claim 146
wherein the product strands forming the cambered sections have
minimum residual torque.

Claim 128 (Withdrawn)^{2, 3}: The trawl net of Claim 146
wherein at least one of the product strands is selected from a
group consisting of braided product strands and twisted product
strands.

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Claim 129 (Withdrawn)^{2, 3}: The trawl net of Claim 146 wherein product strands are enclosed within a side wall which establish a cavity for receiving the product strands.

Claim 130 (Withdrawn)^{2, 3}: The trawl net of Claim 146 wherein the cambered sections include a corkscrew-shaped member.

Claim 131 (Withdrawn)^{2, 3}: The trawl net of Claim 144 wherein the lift vector for cell bars having cambered sections is directed outward from the trawl net.

Claim 132 (Withdrawn)^{2, 3}: The trawl net of Claim 151 wherein cambered sections having outwardly directed lift vectors are located in both side panels included in the trawl net.

Claim 133 (Previously presented)²: An improved method for catching fish with a trawl net comprising the steps of:

(a) assembling the trawl net by:

i. interconnecting mesh cells, each of said mesh cells including at least two cell bars, portions of at least one of said at least two cell bars being formed with a plurality of cambered sections;

(b) from a vessel disposed on a surface of a body of water:

10 i. deploying into a body of water as part of the trawl
net cell bars having cambered sections; and

15 ii. propelling at least cell bars having cambered
sections through the body of water relative to a water flow
vector that is neither parallel nor perpendicular to cambered-
sectioned cell bars, so that movement of cell bars through the
water environment relative to the water flow vector creates a
pressure differential across cambered sections, thereby
establishing a lift vector for cambered-sectioned cell bars in
a predetermined direction.

Claim 134 (Currently amended)²: The method of Claim [153]
133 wherein step (a) of assembling the trawl further comprises a
step of:

5 ii. forming cambered-sectioned cell bars having a first
and a second product strand by:

(A) extending the first product strand along an
axis of symmetry of cell bars; and
(B) twisting the second product strand around the
first product strand and about the axis of symmetry
10 in helical fashion;

whereby the second product strand forms a series of turns in
contact with an outer surface of the first product strand.

Claim 135 (Currently amended)²: The method of Claim [153] 133 wherein step (a) of assembling the trawl further comprises a step of:

5 ii. forming cambered-sectioned cell bars having a first product strand and a second product strand that has a smaller diameter than the first product strand by:

(A) extending the first product strand along an axis of symmetry of cell bars; and

10 (B) twisting the second product strand around the first product strand and about the axis of symmetry in helical fashion;

whereby the second product strand forms a series of turns in contact with an outer surface of the first product strand.

Claim 136 (Withdrawn)^{2, 3}: The method of Claim 153 wherein step (a) of assembling the trawl further comprises a step of:

ii. forming cambered-sectioned cell bars from a strap.

Claim 137 (Withdrawn)^{2, 3}: The method of Claim 156 wherein the step of forming cambered-sectioned cell bars from a strap further includes attaching together two lengths of strapping material.

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Claim 138 (Withdrawn)^{2, 3}: The method of Claim 156 wherein
the step of forming cambered-sectioned cell bars from a strap
further includes sewing together two lengths of strapping material.

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Amendments to the Drawings

This response does not amend the patent application's drawings.